DOCUMENTATION RECORDS
FOR
HAZARD RANKING SYSTEM

INSTRUCTIONS: As briefly as possible summarize the information you used to assign the score for each factor (e.g., "Waste quantity = 4,230 drums plus 800 cubic yards of sludges"). The source of information should be provided for each entry and should be a bibliographic-type reference. Include the location of the document.

FACILITY NAME: North Market Street, Spokane

LOCATION: SW 1/4, Sec. 22, T26N, R43E, WM

DATE SCORED: March 3, 1986

PERSON SCORING: P. O'Flaherty, B. Morson

PRIMARY SOURCE(S) OF INFORMATION (e.g., EPA region, state, FIT, etc.):

EPA CERCLIS Files, WDOE EAstern Regional Files, Phase I Remedial Investigation by Golder Associates

FACTORS NOT SCORED DUE TO INSUFFICIENT INFORMATION:

None

COMMENTS OR QUALIFICATIONS:

At the time of this documentation, activities related to the petroleum industry and petroleum wastes are specifically exempted from CERCLA. It is likely that the compounds used in this scoring are components of petroleum products and were not released as benzene, toluene, or other compound.

GROUNDWATER ROUTE

1. OBSERVED RELEASE

Contaminants Detected (5 Maximum):

Benzene: Hanson well - 4600 ppb (7/84) + 245 ppb (5/85); A to Z well - 3.1 ppb (7/84)
Toluene: Hanson well - 1300 ppb (7/84) + 11 ppb (5/85)
O-xylene: Hanson well - 290 ppb (7/84)
Ethylbenzene: Hanson well - 1300 ppb (7/84)

Ref. 4
HRS Score: 45 (Users Manual, p. 9)

Rationale For Attributing The Contaminants To The Facility:

Chemicals are components of petroleum products and wastes. At least 16 potentially responsible parties have been identified within one mile of detected well contamination. Land disposal or spills have been reported from Tosco, Chevron pipeline and Midget Oil.

Ref. 3

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2. ROUTE CHARACTERISTICS

DEPTH TO AQUIFER OF CONCERN

Name/Description Of Aquifer(s) Of Concern:

N/A

Depth(s) From The Ground Surface To The Highest Seasonal Level Of The Saturated Zone (Water Table[s]) Of The Aquifer Of Concern:

N/A

Depth From The Ground Surface To The Lowest Point Of Waste Disposal/Storage:

N/A

NET PRECIPITATION

Mean Annual Or Seasonal Precipitation (List Months For Seasonal):

N/A

Mean Annual Lake or Seasonal Evaporation (List Months For Seasonal):

N/A

Net Precipitation (Subtract The Above Figures):

N/A

PERMEABILITY OF UNSATURATED ZONE

Soil Type In Unsaturated Zone:

N/A

Permeability Associated With Soil Type:

N/A

PHYSICAL STATE

Physical State Of Substances At Time Of Disposal (Or At Present Time For Generated Gases):

N/A

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3. CONTAINMENT

CONTAINMENT

Method(s) Of Waste Or Leachate Containment Evaluated:

N/A

Method With Highest Score:

N/A

4. WASTE CHARACTERISTICS

TOXICITY AND PERSISTENCE

Compound(s) Evaluated:

	Toxicity	Persistence
Lead (Tosco, sludges of leaded fuels)	3	3
Benzene	3	1
Toluene	3	1
PCB (in soil at Midget)	3	3

Ref. 2

Compound With Highest Score:

Lead, PCB

HRS Score: 18 (Users Manual, p. 18)

HAZARDOUS WASTE QUANTITY

Total Quantity Of Hazardous Substances At The Facility, Excluding Those With A Containment Score of 0 (Give A reasonable Estimate Even If Quantity Is Above Maximum):

At least 1000 cubic yards.

Ref. 12
HRS Score: 6 (Users Manual, p. 19)

Basis of Estimating And/Or Computing Waste Quantity:

Draper Tractor had at least 1000 cu yds of oil-contaminated soil material on-site. This was removed from the property in 1978. There is still oiled soil on the property. Tosco had waste oil ponds on site of unknown depth and dimensions. Up to 30,000 bbls of cleaning water from the Chevron Pipeline are known to have been "disposed on the Chevron Pipeline Co. property." It was impossible to confirm whether this indicates disposal to ground, therefore this amount was not used in calculations (Ref. 3).

5. TARGETS

GROUNDWATER USE

Use(s) Of Aquifer(s) Of Concern Within A 3-Mile Radius Of The Facility:

Drinking, industrial, irrigation. The Spokane Valley-Rathdrum Prairie Aquifer is designated a Sole Source Aquifer (Refs. 5, 6, 7, 8, 16).

HRS Score: 3 (Users Manual, p. 24)

DISTANCE TO NEAREST WELL

Location Of Nearest Well Drawing From Aquifer Of Concern Or Occupied Building Not Served By A Public Water Supply:

R.A. Hanson and A to Z wells located in SW 1/4, Sec. 22, T26N, R43E, WM (Ref. 3, 7).

DISTANCE TO ABOVE WELL OR BUILDING:

Wells are contaminated and therefore are considered to be on-site (Refs. 3, 4, 9).

HRS Score: 4 (Users Manual, p. 25)

POPULATION SERVED BY GROUNDWATER WELLS WITHIN A 3-MILE RADIUS

Identified Water-Supply Well(s) Drawing From Aquifer(s) Of Concern Within A 3-Mile Radius And Populations Served By Each:

City of Spokane, Central Avenue wells (176,700); Spokane Suburban Water Dist. (2,170); N. Spokane Irrigation District (2,400); Whitworth Water Dist. #2 (11,899); 21 other public systems serving approximately 2,700; approximately 135 private wells serving 475 (Refs. 6, 7, 8).

Computation Of Land Area Irrigated By Supply Well(s) Drawing From Aquifer(s) Of Concern Within A 3-mile Radius, And Conversion To Population (1.5 People Per Acre):

1,814 acres (approx.) x 1.5 = 2,721 people
(Ref. 8)

Total Population Served By Groundwater Within A 3-Mile Radius:

199,065 people

HRS Score: 5 (Users Manual, p. 27)
Matrix Score: 40 (Users Manual, p. 26)

SURFACE WATER ROUTE

1. OBSERVED RELEASE

Contaminants Detected In Surface Water At The Facility Or Downhill From It (5 maximum):

None

Rationale For Attributing The Contaminants To The Facility:

N/A

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2. ROUTE CHARACTERISTICS

FACILITY SLOPE AND INTERVENING TERRAIN

Average Slope Of Facility In Percent:

Elevations range from 1,976 ft (R.A. Hanson well) to 2,020 ft (near Midget Oil) over approximately 3,000 ft distance which equals a slope of 1.5%.

Name/Description Of Nearest Downslope Surface Water:

Unnamed intermittent stream flows from Gerlach Road SW past the north side of Tosco and then to the north along Market Street. There is no surface outlet. (Ref. 9)

Average Slope Of Terrain Between Facility And Above-Cited Surface Water Body In Percent:

Elevation at Hanson well is 1,976 ft; elevation of stream about 1,966 ft. Horizontal distance to stream is about 500 ft. Therefore, slope is 2.0% (Ref. 9).

Is The Facility Located Either Totally Or Partially In Surface Water?

No (Ref. 9).

HRS Matrix Score: 0 (Users Manual, p. 31)

Is The Facility Completely Surrounded By Areas Of Higher Elevation?

No (Ref. 9).

ONE-YEAR 24-HOUR RAINFALL IN INCHES

1-1.25 inches (Ref. 10).

HRS Score: 1 (Users Manual, p. 32)

DISTANCE TO NEAREST DOWNSLOPE SURFACE WATER

Approximately 500 ft from R.A. Hanson well to unnamed intermittent stream (Ref. 9).

HRS Score: 3 (Users Manual, p. 32)

PHYSICAL STATE OF WASTE

Liquid: fuels, oils, emulsions (Refs. 3, 12, 14, 15).

HRS Score: 3 (Users Manual, p. 16)

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3. CONTAINMENT

CONTAINMENT

Method(s) Of Waste Or Leachate Containment Evaluated:

Prior to wastes being hauled off of Draper Tractor property, Mr. Draper reported that "heavy oil contamination was found from the ground surface to a depth of 30 feet." This site was scored as a landfill with no cover or diversion system (Ref. 12).

Method With Highest Score:

Landfill with no cover or diversion system.

4. WASTE CHARACTERISTICS

TOXICITY AND PERSISTENCE

Compound(s) Evaluated:

	Toxicity	Persistence
Lead	3	3
Benzene	3	1
Toluene	3	1

Ref. 2

Compound With Highest Score:

Lead

HRS Score: 18 (Users Manual, p. 18)

HAZARDOUS WASTE QUANTITY

Total Quantity Of Hazardous Substances At The Facility, Excluding Those With A Containment Score Of 0 (Give A Reasonable Estimate Even If Quantity Is Above Maximum):

1000 cu yds (Ref. 12).

HRS Score: 6 (Users Manual, p. 19)

Basis Of Estimating And/Or Computing Waste Quantity:

This is the amount of contaminated soil removed from the Draper property in 1978. Because no information is available on the construction of the waste ponds at Tosco, the volume of these ponds was not used in calculating the waste quantity.

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5. TARGETS

SURFACE WATER USE

Use(s) Of Surface Water Within 3 miles Downstream Of The Hazardous Substance:

No known uses. Only surface water within 3 miles is an unnamed intermittent stream with no surface outlet.

HRS Score: 0 (Users Manual, p. 34)

Is There Tidal Influence?

No (Ref. 9).

DISTANCE TO A SENSITIVE ENVIRONMENT

Distance To 5-acre (Minimum) Coastal Wetland, If 2 miles Or Less:

None (Ref. 9).

Distance To 5-Acre (Minimum) Freshwater Wetland, If 1 Mile Or Less:

None (Ref. 9).

Distance To Critical Habitat Of An Endangered Species Or National Wildlife Refuge, If 1 Mile Or Less:

None (Ref. 17).

HRS Score: 0 (Users Manual, p. 37)

POPULATION SERVED BY SURFACE WATER

Location(s) Of Water-supply Intake(s) Within 3 Miles (Free-Flowing Bodies) Or 1 Mile (Static Water Bodies) Downstream Of The Hazardous Substance And Population Served By Each Intake:

No known intakes (Ref. 8).

Computation Of Land Area Irrigated By Above-Cited Intake(s) And Conversion To Population (1.5 People Per Acre):

None known (Ref. 8).

Total Population Served:

0

HRS Score: 0 (Users Manual, p. 38)

Name/Description Of Nearest Intake Of Above Water Bodies:

N/A

Distance To Above-cited Intakes, Measured In Stream Miles.

N/A

AIR ROUTE

(no air data; route not scored)

1. OBSERVED RELEASE

Contaminants Detected:

Date And Location Of Detection Of Contaminants:

Methods Used To Detect The Contaminants:

Rationale For Attributing The Contaminants To The Site:

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2. WASTE CHARACTERISTICS

Reactivity And Incompatibility

Most Reactive Compound:

Most Incompatible Pair Of Compounds:

TOXICITY

Most Toxic Compound:

HAZARDOUS WASTE QUANTITY

Total Quantity Of Hazardous Waste:

Basis Of Estimating And/Or Computing Waste Quantity:

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3. TARGETS

POPULATION WITHIN 4-MILE RADIUS

Circle Radius Used, Give Population, And Indicate How Determined:

0 to 4 mi 0 to 1 mi 0 to 1/2 mi 0 to 1/4 mi

DISTANCE TO A SENSITIVE ENVIRONMENT

Distance to 5-Acre (Minimum) Coastal Wetland, If 2 Miles Or Less:

Distance To 5-Acre (Minimum) Freshwater Wetland, If 1 Mile Or Less:

Distance To Critical Habitat Of An Endangered Species, If 1 Mile Or Less:

LAND USE

Distance To Commercial/Industrial Area, If 1 Mile Or Less:

Distance To national Or State Park, Forest, Or Wildlife Reserve, If 2 Miles Or Less:

Distance To Residential Area, If 2 miles Or Less:

Distance To Agricultural Land In Production Within Past 5 years, If 1 Mile Or Less:

Distance To Prime Agricultural Land In Production Within Past 5 Years, If 2 Miles Or Less:

Is A Historic Or Landmark Site (National Register Or Historic Places And National Natural Landmarks) Within The View Of The Site?

FIRE AND EXPLOSION

(no known certified fire/explosion threat; route not scored)

1. CONTAINMENT

Hazardous Substances Present:

Type Of Containment, If Applicable:

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2. WASTE CHARACTERISTICS

DIRECT EVIDENCE

Type Of Instrument And Measurements:

IGNITABILITY

Compound Used:

REACTIVITY

Most Reactive Compound:

INCOMPATIBILITY

Most Incompatible Pair Of Compounds:

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HAZARDOUS WASTE QUANTITY

Total Quantity Of Hazardous Substances At The Facility:

Basis Of Estimating And/Or Computing Waste Quantity:

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3. TARGETS

DISTANCE TO NEAREST POPULATION

DISTANCE TO NEAREST BUILDING

DISTANCE TO SENSITIVE ENVIRONMENT

Distance To Wetlands:

Distance To Critical Habitat:

LAND USE

Distance To Commercial/Industrial Area, If 1 Mile Or Less:

Distance To National Or State Park, Forest, Or Wildlife Reserve, If 2 Miles Or Less:

Distance To Residential Area, If 2 Miles Or Less:

Distance To Agricultural Land In Production Within Past 5 years, If 1 Mile Or Less:

Distance To Prime Agricultural Land In Production Within Past 5 years, If 2 Miles Or Less:

Is A historic Or Landmark Site (National Register Or Historic Places And National Natural Landmarks) Within The View Of The Site?

POPULATION WITHIN 2-MILE RADIUS

BUILDINGS WITHIN 2-MILE RADIUS

1. OBSERVED INCIDENT

Date, Location, And Pertinent Details Of Incident:

None.

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2. ACCESSIBILITY

Describe Type Of Barrier(s):

Access to open drums of waste oil and contaminated soil at Midget Oil is not restricted by any means (Refs. 13, 15).

HRS Score: 3 (Users Manual, p. 57)

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3. CONTAINMENT

Type Of Containment, If Applicable:

There are open drums of waste oil and spills to ground at Midget Oil (Refs. 13, 15).

HRS Score: 15 (Users Manual, p. 59)

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4. WASTE CHARACTERISTICS

TOXICITY

Compounds Evaluated:

	Toxicity
PCB	3
Benzene	3
Toluene	3

Compound With Highest Score:

PCB, Benzene, Toluene

HRS Score: 3 (Users Manual, p. 59)

5. TARGETS

POPULATION WITHIN 1-MILE RADIUS

1,061 (Ref. 18).

HRS Score: 3 (Users Manual, p. 59)

DISTANCE TO CRITICAL HABITAT (OF ENDANGERED SPECIES)

None (Ref. 17).

HRS Score: 0 (Users Manual, p. 60)

REFERENCES

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3. Golder Associates. 1985. Phase I Remedial Investigation of the North Market Street Site, Spokane, Washington, Volume I. Final Report to State of Washington Department of Ecology.

4. EPA Manchester Lab Reports: 7/30/84 for Samples 28000 and 28001; 5/6/85 for sample 137001-137005.

5. Washington State Water Supply Bulletin, #27.

6. WDSHS. 1985. Public Water Supply System Listings.

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8. WDOE. 1985. Recorded Water Rights of the Department of Ecology Region 3.

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12. Hileman, J. 5/19/80. EPA Site Inspection of Draper Tractor, Spokane, Washington, conducted March 11, 1980. Memo to J. Barich, EPA.

13. SAIC. 5/16/85. Midget Oil Site Driveby memo to files.

14. Smith, W.P. 9/2/80. EPA Site Inspection of Midget Oil, Spokane, Washington conducted 8/27/80. Memo to J. Barich, EPA.

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17. Bottorff, J., USFWS. Endangered Species Office, Personal Communication 5/22/84.

18. Spokane County Population Report 1980.

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20. U.S. Army Corps of Engineers. 1975. Washington Environmental Atlas. Prepared by Environmental Resources Section, Seattle District, U.S. Army Corps of Engineers.

Complete References on file EPA Region X, Seattle.